

**AMENDMENTS TO THE CLAIMS**

This listing of claims replaces all previous listings.

1. (Currently amended) A resonator comprising a shell (1) a having a pole (2) held by a support rod (3), the shell (1) having an annular edge (4) defined by an inside surface (5) and an outside surface (6) that are ~~geometrically similar~~ substantially hemispheres and that extend around a common axis of revolution (R), wherein a center (C1) of the inside surface (5) and a center (C2) of the outside surface (6) are offset relative to each other along the axis of revolution (5) with a predetermined distance (d) between the centers (C1, C2)and a radius (R1) of the inside surface (5) is different from a radius (R2) of the outside surface (6) in such a manner that the shell presents thickness (E) along the annular edge (4) that is greater than the thickness (e) that it the shell presents in the vicinity of the pole.

2. (Cancelled)

3. (Cancelled)

4. (Currently amended) A resonator according to claim 3 1, wherein the centers (C1, C2) of the inside surface and of the outside surface extend on either side of a plane (P) containing the annular edge (4).